RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/553,051_

Source: _IFWO_

Date Processed by STIC: _8/29/06_

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: _10/553,051_

CRF Edit Date: _8/29/06_
Edited by: _AC_

____ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

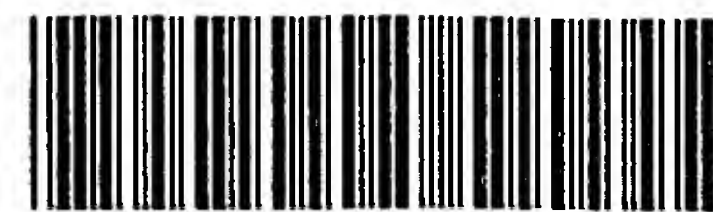____ Corrected the SEQ ID NO. Sequence numbers edited were:

_____

____ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

_____

__✓__ Deleted: __✓__ invalid beginning/end-of-file text ; ____ page numbers

____ Inserted mandatory headings/numeric identifiers, specifically:

_____

____ Moved responses to same line as heading/numeric identifier, specifically:

_____

__✓__ Other: _Sequence 2 – deleted "543" under amino acid_

_____

IFWO

RAW SEQUENCE LISTING   DATE: 08/29/2006
PATENT APPLICATION: US/10/553,051   TIME: 10:29:48

   Input Set : **A:\PTO.AMC.txt**
   Output Set: **N:\CRF4\08292006\J553051.raw**

```
      3 <110> APPLICANT: Japan Science and Technology Agency
      5 <120> TITLE OF INVENTION: Mouse Deficient In Glutamate Transporter GLAST Function
      7 <130> FILE REFERENCE: G05-0071
C-->  9 <140> CURRENT APPLICATION NUMBER: US/10/553,051
C-->  9 <141> CURRENT FILING DATE: 2005-10-12
      9 <150> PRIOR APPLICATION NUMBER: JP2003-114793
     10 <151> PRIOR FILING DATE: 2003-04-18
     12 <160> NUMBER OF SEQ ID NOS: 2
     14 <210> SEQ ID NO: 1
     15 <211> LENGTH: 1629
     16 <212> TYPE: DNA
     17 <213> ORGANISM: Mouse
     19 <400> SEQUENCE: 1
     20 atgaccaaaa gcaacggaga agagcctagg atggggggca ggatggagag attgcagcaa     60
     21 ggggtccgca agcggacact tctggccaag aagaaagttc agagcctcac caaggaagat    120
     22 gttaagagtt acctgtttcg gaatgccttc gttctgctca cggtcactgc tgtcattgtg    180
     23 ggtacaatcc ttggatttgc cctccgaccg tataaaatga gctaccggga ggtgaagtac    240
     24 ttttcgttcc ctggggagct tctcatgagg atgctgcaga tgctggtctt gcccctgatc    300
     25 atctccagtc tcgtcacagg aatggcggcc ctagatagta aggcatccgg gaagatgggg    360
     26 atgcgcgctg tagtctatta catgactact accatcattg ctgtggtgat tggcataatc    420
     27 attgtcatca tcatccaccc cggaaagggc acaaaggaaa acatgtacag agaaggtaaa    480
     28 atcgtgcagg tcactgcagc agatgccttc ctggatttga tcaggaacat gttccctccc    540
     29 aatctggtag aagcctgctt taaacagttt aaaaccagct acgagaaaag aagctttaaa    600
     30 gtgcctatcc agtccaacga aacacttctg ggcgccgtga tcaacaacgt gtcagaggcc    660
     31 atggagactc tgacccggat ccgggaggag atggtgcccg tgcctggatc tgtgaatggg    720
     32 gtcaatgccc tgggcctagt tgtcttctcc atgtgcttcg gtttcgtgat cggaaacatg    780
     33 aaggagcagg ggcaagcgct gagagagttc tttgattctc ttaacgaagc catcatgcga    840
     34 ttggtcgcgg tgataatgtg gtatgcgcct ctgggcatcc tcttcttgat cgcagggaag    900
     35 attgttgaga tggaagacat gggtgtgatt gggggacagc ttgccatgta caccgtgaca    960
     36 gtcattgtcg gcctcctcat tcacgccgtc atcgtcctgc ctctcctcta cttcctggta   1020
     37 acccggaaga acccctgggt tttcattgga gggttgctgc aagcgctcat cacagccctt   1080
     38 gggacctcct caagttctgc caccctaccc atcactttca gtgcctgga agagaacaat   1140
     39 ggtgtggaca aacgcatcac cagatttgtg ctccccgtgg gggccaccat taacatggat   1200
     40 gggaccgccc tctacgaggc tttggctgcc attttcatcg ctcaagtgaa caactttgac   1260
     41 ctgaactttg acagattat aacaataagc atcacagcca cggccgcaag catcggggca   1320
     42 gccgggattc ctcaggccgg tctggtcacc atggtcatcg tgctgacatc tgtgggcctg   1380
     43 cccacagatg acatcacact catcattgca gtggactggt ttctggaccg cctccgaacc   1440
     44 accaccaacg tactgggtga ctccctcgga gcagggattg tcgagcactt gtcccgacat   1500
     45 gaactgaaga accgagatgt tgaaatgggg aactcggtga ttgaggagaa cgaaatgaag   1560
     46 aagccgtatc agctgattgc ccaggacaat gaaccggaga aacccgtggc agacagcgaa   1620
     47 accaagatg                                                          1629
     49 <210> SEQ ID NO: 2
     50 <211> LENGTH: 543
```

RAW SEQUENCE LISTING   DATE: 08/29/2006
PATENT APPLICATION: US/10/553,051   TIME: 10:29:48

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08292006\J553051.raw**

```
51 <212> TYPE: PRT
52 <213> ORGANISM: Mouse
54 <400> SEQUENCE: 2
55 Met Thr Lys Ser Asn Gly Glu Glu Pro Arg Met Gly Gly Arg Met Glu
56 1               5                   10                  15
57 Arg Leu Gln Gln Gly Val Arg Lys Arg Thr Leu Leu Ala Lys Lys Lys
58              20                  25                  30
59 Val Gln Ser Leu Thr Lys Glu Asp Val Lys Ser Tyr Leu Phe Arg Asn
60          35                  40                  45
61 Ala Phe Val Leu Leu Thr Val Thr Ala Val Ile Val Gly Thr Ile Leu
62      50                  55                  60
63 Gly Phe Ala Leu Arg Pro Tyr Lys Met Ser Tyr Arg Glu Val Lys Tyr
64 65                  70                  75                  80
65 Phe Ser Phe Pro Gly Glu Leu Leu Met Arg Met Leu Gln Met Leu Val
66                  85                  90                  95
67 Leu Pro Leu Ile Ile Ser Ser Leu Val Thr Gly Met Ala Ala Leu Asp
68              100                 105                 110
69 Ser Lys Ala Ser Gly Lys Met Gly Met Arg Ala Val Val Tyr Tyr Met
70              115                 120                 125
71 Thr Thr Thr Ile Ile Ala Val Val Ile Gly Ile Ile Ile Val Ile Ile
72      130                 135                 140
73 Ile His Pro Gly Lys Gly Thr Lys Glu Asn Met Tyr Arg Glu Gly Lys
74 145                 150                 155                 160
75 Ile Val Gln Val Thr Ala Ala Asp Ala Phe Leu Asp Leu Ile Arg Asn
76              165                 170                 175
77 Met Phe Pro Pro Asn Leu Val Glu Ala Cys Phe Lys Gln Phe Lys Thr
78              180                 185                 190
79 Ser Tyr Glu Lys Arg Ser Phe Lys Val Pro Ile Gln Ser Asn Glu Thr
80              195                 200                 205
81 Leu Leu Gly Ala Val Ile Asn Asn Val Ser Glu Ala Met Glu Thr Leu
82      210                 215                 220
83 Thr Arg Ile Arg Glu Glu Met Val Pro Val Pro Gly Ser Val Asn Gly
84 225                 230                 235                 240
85 Val Asn Ala Leu Gly Leu Val Val Phe Ser Met Cys Phe Gly Phe Val
86              245                 250                 255
87 Ile Gly Asn Met Lys Glu Gln Gly Gln Ala Leu Arg Glu Phe Phe Asp
88              260                 265                 270
89 Ser Leu Asn Glu Ala Ile Met Arg Leu Val Ala Val Ile Met Trp Tyr
90              275                 280                 285
91 Ala Pro Leu Gly Ile Leu Phe Leu Ile Ala Gly Lys Ile Val Glu Met
92      290                 295                 300
93 Glu Asp Met Gly Val Ile Gly Gly Gln Leu Ala Met Tyr Thr Val Thr
94 305                 310                 315                 320
95 Val Ile Val Gly Leu Leu Ile His Ala Val Ile Val Leu Pro Leu Leu
96              325                 330                 335
97 Tyr Phe Leu Val Thr Arg Lys Asn Pro Trp Val Phe Ile Gly Gly Leu
98              340                 345                 350
99 Leu Gln Ala Leu Ile Thr Ala Leu Gly Thr Ser Ser Ser Ser Ala Thr
100          355                 360                 365
```

```
101 Leu Pro Ile Thr Phe Lys Cys Leu Glu Glu Asn Asn Gly Val Asp Lys
102     370             375             380
103 Arg Ile Thr Arg Phe Val Leu Pro Val Gly Ala Thr Ile Asn Met Asp
104 385             390             395             400
105 Gly Thr Ala Leu Tyr Glu Ala Leu Ala Ala Ile Phe Ile Ala Gln Val
106             405             410             415
107 Asn Asn Phe Asp Leu Asn Phe Gly Gln Ile Ile Thr Ile Ser Ile Thr
108         420             425             430
109 Ala Thr Ala Ala Ser Ile Gly Ala Ala Gly Ile Pro Gln Ala Gly Leu
110     435             440             445
111 Val Thr Met Val Ile Val Leu Thr Ser Val Gly Leu Pro Thr Asp Asp
112     450             455             460
113 Ile Thr Leu Ile Ile Ala Val Asp Trp Phe Leu Asp Arg Leu Arg Thr
114 465             470             475             480
115 Thr Thr Asn Val Leu Gly Asp Ser Leu Gly Ala Gly Ile Val Glu His
116             485             490             495
117 Leu Ser Arg His Glu Leu Lys Asn Arg Asp Val Glu Met Gly Asn Ser
118         500             505             510
119 Val Ile Glu Glu Asn Glu Met Lys Lys Pro Tyr Gln Leu Ile Ala Gln
120     515             520             525
121 Asp Asn Glu Pro Glu Lys Pro Val Ala Asp Ser Glu Thr Lys Met
122     530             535             540
```

VERIFICATION SUMMARY   DATE: 08/29/2006
PATENT APPLICATION: **US/10/553,051**   TIME: 10:29:49

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08292006\J553051.raw**

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

Raw Sequence Listing before editing (for reference only)

IFWO

RAW SEQUENCE LISTING   DATE: 08/24/2006
PATENT APPLICATION: US/10/553,051   TIME: 15:02:52

Input Set : **A:\23312-118sequence.txt**
Output Set: **N:\CRF4\08242006\J553051.raw**

```
 3 <110> APPLICANT: Japan Science and Technology Agency
 5 <120> TITLE OF INVENTION: Mouse Deficient In Glutamate Transporter GLAST Function
 7 <130> FILE REFERENCE: G05-0071
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/553,051
C--> 9 <141> CURRENT FILING DATE: 2005-10-12
 9 <150> PRIOR APPLICATION NUMBER: JP2003-114793
10 <151> PRIOR FILING DATE: 2003-04-18
12 <160> NUMBER OF SEQ ID NOS: 2
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 1629
16 <212> TYPE: DNA
17 <213> ORGANISM: Mouse
19 <400> SEQUENCE: 1
20 atgaccaaaa gcaacggaga agagcctagg atggggggca ggatggagag attgcagcaa   60
21 ggggtccgca agcggacact tctggccaag aagaaagttc agagcctcac caaggaagat  120
22 gttaagagtt acctgtttcg gaatgccttc gttctgctca cggtcactgc tgtcattgtg  180
23 ggtacaatcc ttggatttgc cctccgaccg tataaaatga gctaccggga ggtgaagtac  240
24 ttttcgttcc ctggggagct tctcatgagg atgctgcaga tgctggtctt gcccctgatc  300
25 atctccagtc tcgtcacagg aatggcggcc ctagatagta aggcatccgg gaagatgggg  360
26 atgcgcgctg tagtctatta catgactact accatcattg ctgtggtgat tggcataatc  420
27 attgtcatca tcatccaccc cggaaagggc acaaaggaaa acatgtacag agaaggtaaa  480
28 atcgtgcagg tcactgcagc agatgccttc ctggatttga tcaggaacat gttccctccc  540
29 aatctggtag aagcctgctt taaacagttt aaaaccagct acgagaaaag aagctttaaa  600
30 gtgcctatcc agtccaacga aacacttctg ggcgccgtga tcaacaacgt gtcagaggcc  660
31 atggagactc tgacccggat ccgggaggag atggtgcccg tgcctggatc tgtgaatggg  720
32 gtcaatgccc tgggcctagt tgtcttctcc atgtgcttcg gtttcgtgat cggaaacatg  780
33 aaggagcagg ggcaagcgct gagagagttc tttgattctc ttaacgaagc catcatgcga  840
34 ttggtcgcgg tgataatgtg gtatgcgcct ctgggcatcc tcttcttgat cgcagggaag  900
35 attgttgaga tggaagacat gggtgtgatt ggggacagc ttgccatgta caccgtgaca  960
36 gtcattgtcg gcctcctcat tcacgccgtc atcgtcctgc ctctcctcta cttcctggta 1020
37 acccggaaga acccctgggt tttcattgga gggttgctgc aagcgctcat cacagccctt 1080
38 gggacctcct caagttctgc caccctaccc atcactttca agtgcctgga agagaacaat 1140
39 ggtgtggaca aacgcatcac cagatttgtg ctccccgtgg gggccaccat taacatggat 1200
40 gggaccgccc tctacgaggc tttggctgcc attttcatcg ctcaagtgaa caactttgac 1260
41 ctgaactttg acagattat aacaataagc atcacagcca cggccgcaag catcggggca 1320
42 gccgggattc ctcaggccgg tctggtcacc atggtcatcg tgctgacatc tgtgggcctg 1380
43 cccacagatg acatcacact catcattgca gtggactggt ttctggaccg cctccgaacc 1440
44 accaccaacg tactgggtga ctccctcgga gcagggattg tcgagcactt gtcccgacat 1500
45 gaactgaaga accgagatgt tgaaatgggg aactcggtga ttgaggagaa cgaaatgaag 1560
46 aagccgtatc agctgattgc ccaggacaat gaaccggaga aacccgtggc agacagcgaa 1620
47 accaagatg                                                         1629
49 <210> SEQ ID NO: 2
50 <211> LENGTH: 543
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RAW SEQUENCE LISTING   DATE: 08/24/2006
PATENT APPLICATION: US/10/553,051   TIME: 15:02:52

Input Set : **A:\23312-118sequence.txt**
Output Set: **N:\CRF4\08242006\J553051.raw**

51 <212> TYPE: PRT
52 <213> ORGANISM: Mouse
54 <400> SEQUENCE: 2
55 Met Thr Lys Ser Asn Gly Glu Glu Pro Arg Met Gly Gly Arg Met Glu
56 1   5   10   15
57 Arg Leu Gln Gln Gly Val Arg Lys Arg Thr Leu Leu Ala Lys Lys Lys
58   20   25   30
59 Val Gln Ser Leu Thr Lys Glu Asp Val Lys Ser Tyr Leu Phe Arg Asn
60   35   40   45
61 Ala Phe Val Leu Leu Thr Val Thr Ala Val Ile Val Gly Thr Ile Leu
62   50   55   60
63 Gly Phe Ala Leu Arg Pro Tyr Lys Met Ser Tyr Arg Glu Val Lys Tyr
64 65   70   75   80
65 Phe Ser Phe Pro Gly Glu Leu Leu Met Arg Met Leu Gln Met Leu Val
66   85   90   95
67 Leu Pro Leu Ile Ile Ser Ser Leu Val Thr Gly Met Ala Ala Leu Asp
68   100   105   110
69 Ser Lys Ala Ser Gly Lys Met Gly Met Arg Ala Val Val Tyr Tyr Met
70   115   120   125
71 Thr Thr Thr Ile Ile Ala Val Val Ile Gly Ile Ile Ile Val Ile Ile
72   130   135   140
73 Ile His Pro Gly Lys Gly Thr Lys Glu Asn Met Tyr Arg Glu Gly Lys
74 145   150   155   160
75 Ile Val Gln Val Thr Ala Ala Asp Ala Phe Leu Asp Leu Ile Arg Asn
76   165   170   175
77 Met Phe Pro Pro Asn Leu Val Glu Ala Cys Phe Lys Gln Phe Lys Thr
78   180   185   190
79 Ser Tyr Glu Lys Arg Ser Phe Lys Val Pro Ile Gln Ser Asn Glu Thr
80   195   200   205
81 Leu Leu Gly Ala Val Ile Asn Asn Val Ser Glu Ala Met Glu Thr Leu
82   210   215   220
83 Thr Arg Ile Arg Glu Glu Met Val Pro Val Pro Gly Ser Val Asn Gly
84 225   230   235   240
85 Val Asn Ala Leu Gly Leu Val Val Phe Ser Met Cys Phe Gly Phe Val
86   245   250   255
87 Ile Gly Asn Met Lys Glu Gln Gly Gln Ala Leu Arg Glu Phe Phe Asp
88   260   265   270
89 Ser Leu Asn Glu Ala Ile Met Arg Leu Val Ala Val Ile Met Trp Tyr
90   275   280   285
91 Ala Pro Leu Gly Ile Leu Phe Leu Ile Ala Gly Lys Ile Val Glu Met
92   290   295   300
93 Glu Asp Met Gly Val Ile Gly Gly Gln Leu Ala Met Tyr Thr Val Thr
94 305   310   315   320
95 Val Ile Val Gly Leu Leu Ile His Ala Val Ile Val Leu Pro Leu Leu
96   325   330   335
97 Tyr Phe Leu Val Thr Arg Lys Asn Pro Trp Val Phe Ile Gly Gly Leu
98   340   345   350
99 Leu Gln Ala Leu Ile Thr Ala Leu Gly Thr Ser Ser Ser Ser Ala Thr
100   355   360   365

RAW SEQUENCE LISTING   DATE: 08/24/2006
PATENT APPLICATION: US/10/553,051   TIME: 15:02:52

        Input Set : A:\23312-118sequence.txt
        Output Set: N:\CRF4\08242006\J553051.raw

```
101 Leu Pro Ile Thr Phe Lys Cys Leu Glu Glu Asn Asn Gly Val Asp Lys
102     370             375             380
103 Arg Ile Thr Arg Phe Val Leu Pro Val Gly Ala Thr Ile Asn Met Asp
104 385             390             395             400
105 Gly Thr Ala Leu Tyr Glu Ala Leu Ala Ala Ile Phe Ile Ala Gln Val
106             405             410             415
107 Asn Asn Phe Asp Leu Asn Phe Gly Gln Ile Ile Thr Ile Ser Ile Thr
108             420             425             430
109 Ala Thr Ala Ala Ser Ile Gly Ala Ala Gly Ile Pro Gln Ala Gly Leu
110         435             440             445
111 Val Thr Met Val Ile Val Leu Thr Ser Val Gly Leu Pro Thr Asp Asp
112     450             455             460
113 Ile Thr Leu Ile Ile Ala Val Asp Trp Phe Leu Asp Arg Leu Arg Thr
114 465             470             475             480
115 Thr Thr Asn Val Leu Gly Asp Ser Leu Gly Ala Gly Ile Val Glu His
116             485             490             495
117 Leu Ser Arg His Glu Leu Lys Asn Arg Asp Val Glu Met Gly Asn Ser
118         500             505             510
119 Val Ile Glu Glu Asn Glu Met Lys Lys Pro Tyr Gln Leu Ile Ala Gln
120     515             520             525
121 Asp Asn Glu Pro Glu Lys Pro Val Ala Asp Ser Glu Thr Lys Met
122     530             535             540     543
124 WASH_1478687.1
```

number the amino acids under every 5 amino acids

VERIFICATION SUMMARY   DATE: 08/24/2006
PATENT APPLICATION: **US/10/553,051**   TIME: 15:02:53

Input Set : **A:\23312-118sequence.txt**
Output Set: **N:\CRF4\08242006\J553051.raw**

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date